



Teaching Communication Skills to Medical Undergraduates -Showing the Right Path

Authors

Dr Kala.B.S¹, Dr M.V. Radhamani²

¹Associate Professor, Department of Obstetrics and Gynaecology, Govt. Medical College Hospital, Kottayam, Kerala, India

Email: drkalapramod@gmail.com

²Additional Professor, Department of Obstetrics and Gynaecology, Govt. Medical College Hospital, Kottayam, Kerala, India

Email: drmvradhamani@gmail.com

Abstract

A structured training in communication skills is not given in most medical colleges in India although Medical council has made it compulsory. Studies on its effectiveness are few in India & abroad. This study is an educational project on the effectiveness of a structured communication skills training to medical undergraduates.

Objectives (1) *To assess the effectiveness of a structured training in communication skills in the attitude of students towards learning them. (2) To assess its effect on knowledge and communication skills.*

Materials & Methods: *Nonrandomised educational intervention project conducted on third year MBBS students after obtaining approval from IRB & ethics committee. Attitude of students towards learning communication skills assessed using a questionnaire devised using Rees & Sheard. After 2 weeks usual clinical training OSCE conducted to assess communication skills. Then a structured training on communication skills given and post training Attitude score and OSCE marks taken and compared.*

Results: *There was a positive attitude towards learning communication skills which significantly improved after the training. Also there was a significant improvement in OSCE marks after the training which shows a significant improvement of communication skills after training.*

Conclusions: *Continuous and structured training in communication skills must be given to medical undergraduates using different contexts and assessment of communication skills must be a part of final assessment.*

Keywords: *Communication skills; structured training; Medical undergraduates; assessment; attitude.*

Introduction

Medicine is a profession which demands a lot of communication skills. Medical education has undergone a lot of changes worldwide. Traditional methods of teaching that focus on knowledge development are not sufficient to equip students

with the qualities expected from them. A good doctor should have good communication skills, competence in practical skills, professionalism, ethics and empathy. Communication skills are crucial since they help in accurate diagnosis, ensure patient compliance and avoid litigation & violence against doctors in unforeseen mishaps.

A doctor's communication & behavior influences patient outcomes such as compliance with treatment, understanding & recall of information¹. WHO has defined five attributes of a doctor as a caregiver providing quality care, who makes optimal use of technologies, promotes healthy life styles, who considers individual & community health requirements and who is able to work efficiently in a team². Effective communication skills are vital to achieve all these. Professionalism which is one of the core competency also demands effective communication skills³. Communication skills can be taught using internationally accepted protocols like Calgary- Cambridge observation guide⁴.

Back ground & Rationale

Lot of changes have occurred in the medical curriculum worldwide. The acquisition of communication and interpersonal skills is recognized and documented as a core competency for training in many countries. In India although it is included as a requirement in the 1997 Graduate Medical Education Regulations of the Medical Council of India, not enough efforts have been made to teach or assess them in most medical colleges in india⁵. Present generation of Indian medical students often have less than adequate communication skills and there is a demand for the same⁵. The vision 2015 document of Medical council of India reaffirms that this training has to given in phase1 and MCI has introduced ATCOM (Attitude and Communication skill module) with this objective.

On literature search many studies have been conducted world over on this subject but only limited number are from India. We are teaching communication skills to some extent during clinical case discussions, but a structured training in communication skills not given to students or their evaluation done in exams so far. In my specialty, since we are not dealing with actual patients, there is a lot of scope for communication and counseling skills. Also something that attracts the students in their first clinical posting itself will make them learn our subject more effectively and mould them in a way desirable for society.

Objectives

1. To assess the effect of a structured communication skill training in the attitude of medical undergraduates towards learning them.
2. To assess the effect of teaching communication skills in their knowledge and communication skills.

GAP

There is a lack of a structured training in communication skills for undergraduate medical students in India. Curriculum has to be revised to incorporate this.

Research Question

1. Is there a change in attitude of medical undergraduates towards learning communication skills after a structured training program?
2. Is there a change in knowledge & communication skills of medical undergraduates after a structured training in communication skills?

Materials & Methods

Study Design

Nonrandomised educational intervention study.

Study Period

3 months from November2017- January 2018.

Study Setting

Department of O&G government medical college Kottayam.

Study Population

3rdsemester MBBS students undergoing clinical posting in the department of Obstetrics & Gynecology during the study period were selected based on the following inclusion & exclusion criteria.

Inclusion Criteria

All 3rd semester students willing to participate in the study by giving informed consent.

Exclusion Criteria

Students who were absent during training sessions and assessment days.

Sample Size

All 3rd semester students attending clinical posting during study period (one batch with 49 students).

Study Tools: (given as Appendix)

- (1) Questionnaire for Pretest ; Communication skill attitude scale (CSAS questionnaire)
- (2) Skills to be Assessed- OSCE- Calgary Cambridge observation guide for patient interview & checklists for others
- (3) Post training questionnaire with reflections for feedback

Ethical Concerns

Approval obtained from ethical committee & IRB of our college. No ethical problems in this study as it is an educational project. Informed consent taken from participating students. The training program will be given to subsequent batches as a part of implementing CBME in our department and no students are denied of benefit.

Methodology

Third semester students attending their first clinical posting in the department of Obstetrics & Gynecology were selected for the study using the above inclusion & exclusion criteria. Their attitude towards learning communication skills was assessed by giving a precourse questionnaire CSAS originally devised by Rees & Sheard. After 2 weeks posting in wards where they were given usual training in patient interview and examination, a pre training OSCE was conducted to assess their communication skills in 4 stations.

- (1) Patient interview
- (2) Patient examination
- (3) Taking a class on antenatal care to pregnant women
- (4) Counselling a term pregnant woman not willing for PV.

Each station assessed by different evaluators using global rating scales for interview & using checklist for other stations.

The communication skill training module was implemented from 3rd week. The classes were taken during the routine morning hours where they had one hour class 8-9AM. One class each week was dedicated to communication skills training.

Table 1 Schedule of Training

	Teaching Objectives	TL method
Day 1 Week 3	Pretest CSAS questionnaire Introduction, Importance of communication skills in Medicine.	CSAS questionnaire Pretraining OSCE Interactive Lecture with ppt ;
Day 2 Week 4	Patient interview skills based on Calgary Cambridge observation guide	Real patient interviews by students & feedback; Showing standard patient interview videos
Day 3 week 5	Patient Examination (communication before & after)	Examination of real patients & feedback. Videos of patient examination
Day 4 week 6	Giving an antenatal class in ward	Observing antenatal class by JR; Making few students to take class
Day 5 week 7	Counselling skills	Role play enacted by JR where a term pregnant woman not willing for PV is counseled
Day 6 week 8	Post test CSAS questionnaire Questionnaire to evaluate training program & reflections by students	Post training OSCE conducted as an end posting exam with 10 stations which had 4 stations for assessment of communication skills also

Analysis

Done by entering the pretraining & post training attitude scores on Microsoft excel as well as the marks of students pre & post training OSCE. The attitude was compared using Wilcoxon signed rank test & skills acquired were compared by scores of pre & post OSCE using paired t-Test. The evaluation of training program was done using the feedback questionnaire from students and also they were asked to reflect on training.

The pre and post training OSCE conducted by faculties other than principal investigator and marks entered in Microsoft excel.

Results

The third semester batch had 49 students. One was excluded from study as he could not attend the post OSCE. So total 48 study subjects. Age of students ranged from 19-24. There were 20 males & 28 female students ie 41.7% males & 58.7% females.

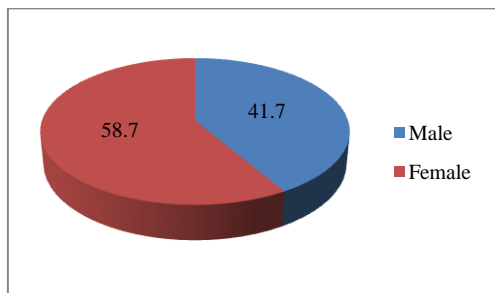


Fig. 1

Assessment of Attitude towards learning communication skills

Table 2 Comparison of Pre & post training attitude score

	Pre attitude Score	Post attitude score
Mean	103.13	109.38
St error of mean	0.568	0.77
Median	103.00	108
Standard error of median	3.934	5.334

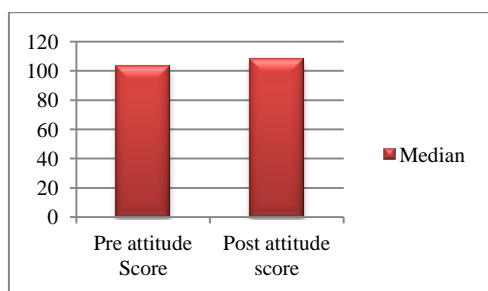


Fig. 2

Range

The pre attitude scores ranged from a minimum of 93 to maximum of 112, while post attitude scores ranged from a minimum of 97- 122.

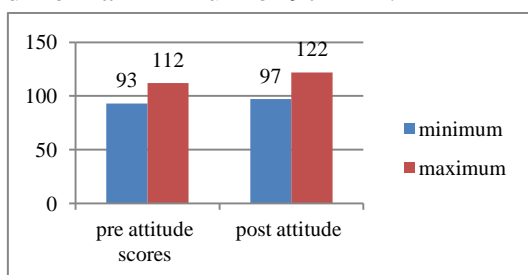


Fig. 3

The Wilcoxon signed rank test was used to compare the attitude scores before & after training. The results was as follows.

Table 3

Pre attitude median	Post attitude median	Test applied	Significance
103	108	Wilcoxon signed rank	.001

Even before the training it there was a positive attitude towards learning communication skills showing that students always welcome such trainings.

Also there was a significant increase in positive attitude of students towards learning communication skills reaffirming that we are in the right path.

Assessment of Communication skills

Table 4 The pre training & post training OSCE marks

	Pre test score	Post test score
Mean	10.76	13.802
Standard error mean	0.184	0.2187
Median	11	13.5

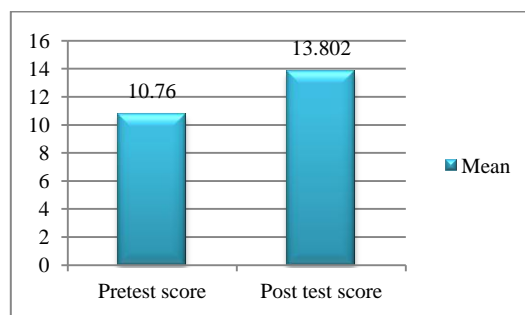


Fig.4

Range

Marks of pretest OSCE ranged from min 8 to max 13 and for post test ranged from min 11.5 to max 17.

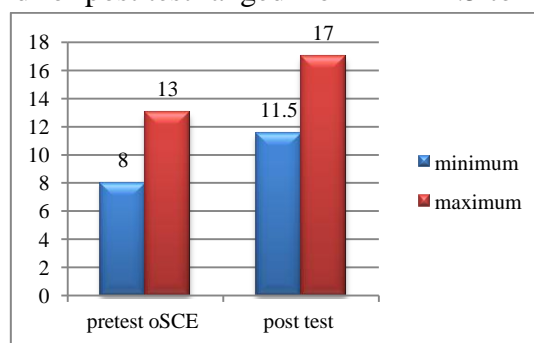


Fig. 5

Table. 5 Paired t -test used to compare the mean marks

Pretest mean	Posttest mean	Standard error pretest	Standard error post test	Test used	t-value	Significance
10.76	13.802	0.184	0.218	Paired t-test	14.526	0.001

These results show a significant improvement in communication skills after the implementation of structured training program.

On comparing the marks obtained for different stations, it was found that marks were low in the pretest for antenatal advice & counseling stations. But in posttest there was significant improvement in these stations. This may be due to improvement in knowledge of Obstetrics at the end of posting as well as due to the influence of role plays & direct observation of antenatal classes taken in wards by junior residents.

On qualitative analysis of reflections of training program, majority opined as excellent & good. They felt it different from routine classes. Among the different TL methods used, role play was the most preferred one and suggested to have further sessions in subsequent phases also.

Discussion

Vision 2015 document of MCI proposes a two month foundation course at the beginning of phase 1 where communication skills training is one of the main objectives. But apart from this induction training nothing is being done in the undergraduate medical education to develop or improve this soft skill. In the present era where we daily hear news of straining doctor patient relationships in the form of attack on doctors & hospitals, what will be the fate of IMG after graduation if nothing is being done to improve this. Through this project, we tried to emphasise the importance of a structured training in communication skills. This study proves that a training in the first clinical exposure itself will lead them in the right way in future practice.

Number of studies have been conducted to assess the attitude of students towards learning communication skills. One study by Bijay Aryl et al at Chitwan medical college concludes that students

have a positive attitude towards learning communication skills and this attitude improved as he passes through various phases of the course⁶. Another study in Nepal also showed a statistically significant difference in attitude between male and female students⁶. Most of these studies used Communication Skill Attitude Scale (CSAS) originally devised by Rees and Collegues⁷. In another study in Pakistan researchers tried to describe the design of a communication skill workshop. Pre and post workshop survey was done and showed a statistically significant difference in the level of understanding before and after workshop⁸. In India Chaudhary et al & Gupta et al gave a structured training to 4th year students and found a significant improvement in their performance in OSCE⁹.

For teaching communication skills, instructional methods like lectures and seminars are less effective than experimental methods like role plays, interaction with real & simulated patients which are preferred by students also¹⁰. In assessment of communication skills it is relevant to assess shows how and does how levels of Millers pyramid. OSCE, mini CEX videotaped doctor-patient interactions are the possible assessment methods and it should be done as a formative assessment.

Communication skills can be assessed at history taking, physical examination and counseling station¹¹. Global rating scales are preferred while assessing communication skills in OSCE. Some misconception regarding communication skill training are that they are not teachable and skills acquired tend to decline over time and experience is the best teacher. For this students must have self awareness & willingness for self reflection¹².

This study indicates that positive attitude of students towards learning communication skills increased by perceiving the relevance of the skills by students. This was also proved in other studies on attitude¹³.

In our study female students have more positive attitude scores than male students and their scores were better. This was in accordance with other studies in Nepal¹⁴. Communication skills can be assessed at history taking, physical examination &

counseling stations¹⁵. In our study real patients were used as we do not have shortage of patients. Simulated patients can be used to teach & assess communication skills¹⁶ as in a study by Fisher et al & Poole et al. So such type of training can be given in institutions with shortage of patients also.

Regarding the teaching methods it is proved that experimental methods where students do interview which are observed directly or through videos with immediate feedback are better than traditional instructional methods¹⁷. This type of method was used and reflections of students showed that they enjoyed it.

Regarding the content of training, previous studies conclude that training for undergraduates must include basic interview & examination skills and for residents must include more complicated skills like breaking a bad news & handling other difficult situations¹⁸.

When we come to assessment, multiple assessment methods using multiple assessers in multiple contexts are shown to be more reliable despite being subjective¹⁹. Formative assessment provide the best opportunity for assessing communication skills with direct feedback then & there.

Limitations of the Study

1. Less participants
2. Also the intervention was of short duration & with limited contexts. But it will be continued in their subsequent phases.
3. Feedback from faculties were not collected.

Challenges during study

1. Conduct of Pretest OSCE: Arranging examiners & conducting a pretest was a real challenge. The post test OSCE was a part of their formative assessment.
2. Arranging role plays- Thanks to our junior residents who actively participated and helped me.
3. Technical problems- while playing videos.

Conclusion & Recommendations

Communication skills are part of affective & psychomotor domains of learning that must be developed as a part of implementing competency based medical Education. Giving formal training even from preclinical years through all phases will shape the medical undergraduates & postgraduates as ideal practitioners which can lead to better health of society. Hence this study recommends.

- (1) Continuous and structured training must be given to medical students and assessment of communication skills must be a part of final assessment in each phase.
- (2) Guidelines to be developed for teaching & assessing communication skills & must be implemented in each & every institution.
- (3) More research has to be done comparing various T-L methods and assessment methods and also comparing training at various phases.
- (4) All faculties must be given training in this context as a part of ATCOM by Medical education units of all medical colleges.

Feedback to be taken from students & faculties for the improvement of ongoing program.

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